

IN THE SPECIFICATION:

Please replace paragraph [0008] with the following amended text:

[0008]—where  $i$  and  $j$  denote the ranking of the catalysts of one generation, ranked according to decreasing catalytic activity, and  $n$  is the number of catalysts in one generation,

Replace paragraph [0009] with the following amended text:

[0009]—and then from the two mixed catalysts to be crossed, at least one individual component which is present in only one of the two catalysts is selected according to the random principle by means of a numerical random generator with a uniform distribution (for example, by means of the program code G05DYF of the NAG LIBRARY [NAG FORTRAN WORKSTATION LIBRARY, NAG Group Ltd., 1986]) and two new catalyst compositions of the next generation are defined in such a way that the selected component is then added to the catalyst which did not contain this component in the preceding generation, while the component in the catalyst containing it originally is omitted,

Replace paragraph [00010] with the following amended text:

[00010]—and

Replace paragraph [00011] with the following amended text:

[00011]—the restructuring of a catalyst of the next generation, when it is based on the principle of mutation, takes places in such a manner

Replace paragraph [00012] with the following amended text:

[00012]—that first a mixed catalyst is randomly selected from a catalyst generation by means of a numerical random generator with a uniform distribution (for example, by means of the program code G05DYF of the NAG LIBRARY [NAG FORTRAN WORKSTATION LIBRARY, NAG Group Ltd., 1986]), and then a single component is selected according to the random principle by means of a numerical random generator with a uniform distribution (for example, by means of the program code G05DYF of the NAG LIBRARY [NAG FORTRAN WORKSTATION LIBRARY, NAG Group Ltd., 1986]), and if this individual component is already contained in the mixed catalyst, it is removed or, if it has not yet been contained in this catalyst, it is added to it.

Replace paragraph [00025] with the following amended text:

[00025]—Figure 1: A bar chart showing propylene yields of the

ten best catalysts of a generation as a function and ~~[sic; of]~~ of their increase within four generations;

Replace paragraph [00026] with the following amended text:

~~[00026]~~—Figure 2: Schematic diagram of crossing and mutation.

Replace paragraph [00028] with the following amended text:

[00028] Catalysts were prepared and tested with the goal of ~~producing [sic, converting]~~ converting propane to propylene by oxidation with oxygen and minimizing the resulting CO and CO<sub>2</sub> oxides. The course of this process included the following steps and led to the results described below.

Replace paragraph [00031] with the following amended text:

[00031] First step: Production of the first generation of catalytic materials from the primary components identified identified.

Replace paragraph [00033] with the following amended text:

[00033] Second step: Parallel preparation and testing of first-generation catalytic materials materials.

Replace paragraph [00035] with the following amended text:

[00035] Third step: Producing the second generation based on the results of testing the first generation of catalysts catalysts.

Replace paragraph [00038] with the following amended text:

[00038] Subsequent steps: Repeating the second and third steps for the coming generations generations.